

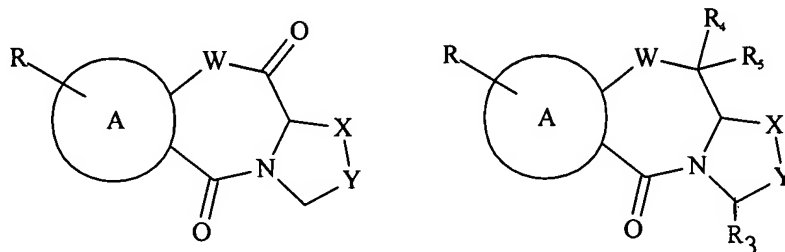
Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-28 (canceled)

Claim 29 (currently amended): A compound having the following formula, or a pharmaceutically acceptable salt thereof:



wherein A is ~~thiazole, benzene, or naphthalene, pyridine, pyrimidine, pyrazine, or quinoline;~~

R is one or more of halogen or NO₂;

X-Y is CH₂-S, S-CH₂, CH₂-O, CH₂-S(O), S(O)-CH₂, CH₂-CH₂, CH₂-CH₂-CH₂, or CH₂-CH₂-CH₂;

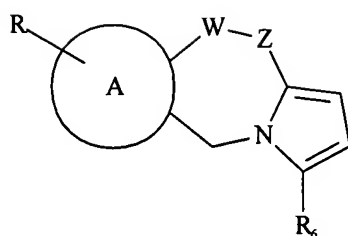
R₃ is H or phenyl;

R₄ is H or hydroxy;

R₅ is H, phenyl, -alkyl-NH₂, -NH-alkyl, or -N(alkyl)₂; and

W is S ~~or~~ O

or wherein the compound is



wherein

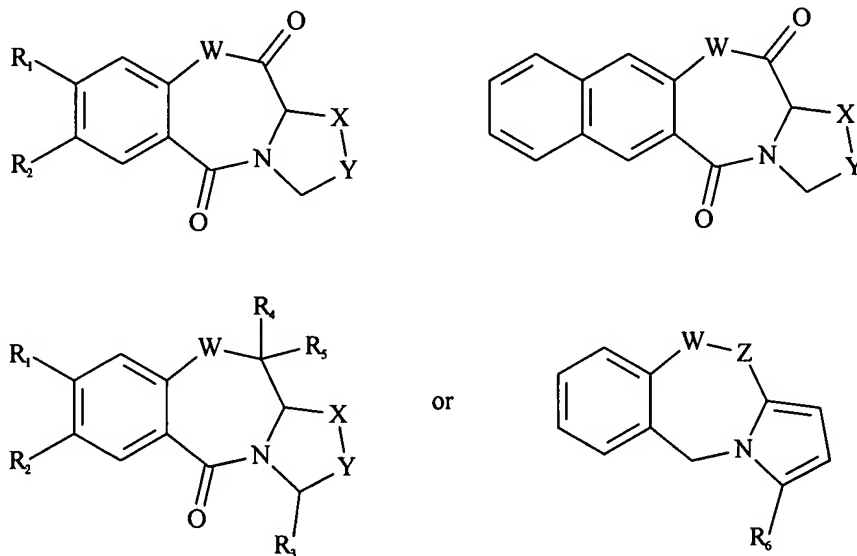
A is ~~thiazole~~, benzene, or naphthalene, ~~pyridine, pyrimidine, pyrazine, or quinoline~~; and
R is one or more of halogen or NO₂;

R₆ is H, unsubstituted alkyl or amine, or alkyl or amine substituted with at least one substituent selected from halogen, alkyl, alkoxy, alkylthio, trifluoromethyl, acyloxy, hydroxy, mercapto, carboxy, aryloxy, ~~aryloxy~~, aryl, arylalkyl, ~~heteroaryl~~, amino, alkylamino, dialkylamino, morpholino, piperidino, pyrrolidin-1-yl, or piperazin-1-yl;

W is S; and

Z is S, O, CH₂, CH₂CH₂, ~~or~~ C=O, ~~-CHCO₂CH₂CH₃, -CHC₆H₄-pF, or -CHC₆H₅.~~

Claim 30 (currently amended): A compound having the following formula, or a pharmaceutically acceptable salt thereof, wherein the compound is:



wherein

X-Y is S-CH₂, CH₂-S, S(O)-CH₂, CH₂-S(O), or CH₂CH₂;

Z is S, O, CH₂, CH₂CH₂, ~~or~~ C=O, ~~-CHCO₂CH₂CH₃, -CHC₆H₄-pF, or -CHC₆H₅;~~

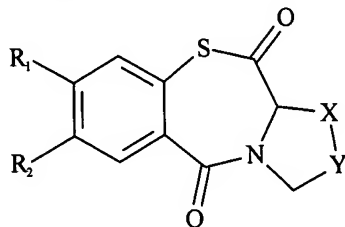
W is S ~~or~~ O;

R₁ is H, ~~halogen~~, lower alkyl, lower alkoxy, or NO₂;

R₂ is H, halogen, lower alkyl or lower alkoxy;

R_3 is H;
 R_4 is hydroxy or H;
 R_5 is phenyl or $N(CH_2CH_2)_2NCH_3$; and
 R_6 is $CH_2N(CH_2CH_2)_2NCH_3$,
provided that R_1 and R_2 are not both H or not both alkoxy.

Claim 31 (original): The compound of claim 30, wherein the compound is

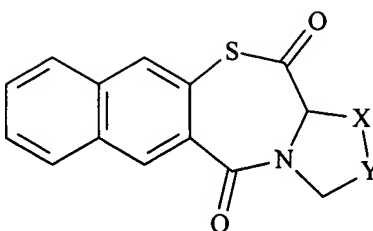


and R_1 is H or NO_2 ;
 R_2 is H, halogen, lower alkyl or lower alkoxy;
provided that R_1 and R_2 are not both H or not both alkoxy.

Claim 32 (previously presented): The compound of claim 30, wherein

R_1 is H, R_2 is Cl, X-Y is S- CH_2 ; or
 R_1 is H, R_2 is Br, X-Y is S- CH_2 ; or
 R_1 is H, R_2 is CH_3 , X-Y is S- CH_2 ; or
 R_1 is H, R_2 is Cl, X-Y is CH_2 -S; or
 R_1 is H, R_2 is Br, X-Y is CH_2 -S; or
 R_1 is H, R_2 is CH_3 , X-Y is CH_2 -S; or
 R_1 is NO_2 , R_2 is H, X-Y is CH_2 -S; or
 R_1 is H, R_2 is OCH_3 , X-Y is CH_2 -S; or
 R_1 is H, R_2 is CH_3 , X-Y is S(O)- CH_2 ; or
 R_1 is H, R_2 is Cl, X-Y is CH_2 -S(O); or
 R_1 is H, R_2 is OCH_3 , X-Y is CH_2 -S(O).

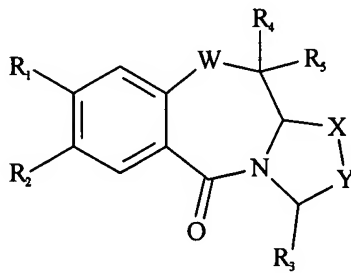
Claim 33 (original): The compound of claim 30, wherein the compound is



and X-Y is S-CH₂ or CH₂-S.

Claim 34 (original): The compound of claim 30, wherein X-Y is S-CH₂.

Claim 35 (currently amended): A compound having the following formula, or a pharmaceutically acceptable salt thereof, wherein the compound is:



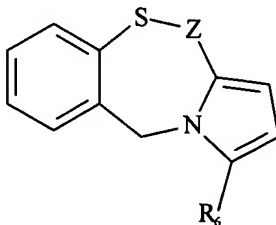
and R₁, R₂ and R₃ are H, R₄ is OH or H;

W is S or O^- ;

R₅ is Ph or N(CH₂CH₂)₂CH₃; and

X-Y is CH₂-CH₂.

Claim 36 (original): The compound of claim 30, wherein the compound is



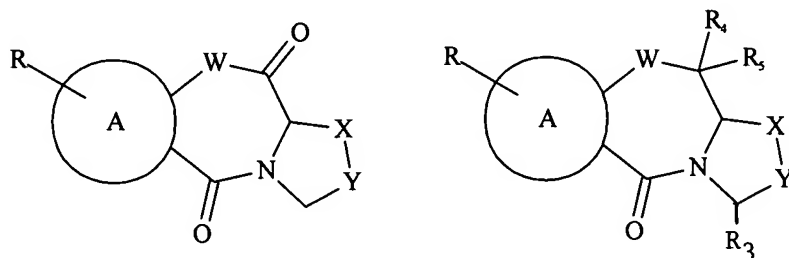
and R₆ is CH₂N(CH₂CH₂)₂NCH₃.

Claim 37 (original): A pharmaceutical composition comprising the compound of claim 29, or the pharmaceutically acceptable salt, and a pharmaceutically acceptable carrier.

Claim 38 (original): A pharmaceutical composition comprising the compound of claim 30, or the pharmaceutically acceptable salt, and a pharmaceutically acceptable carrier.

Claims 39-46 (canceled)

Claim 47 (currently amended): A method of treating HIV infection in a subject, comprising administering to the subject a therapeutically effective amount of a compound selected from the group consisting of:



wherein A is ~~thiazole~~, benzene, or naphthalene, ~~pyridine, pyrimidine, pyrazine, or quinoline~~;

R is one or more of halogen or NO₂;

X-Y is CH₂-S, S-CH₂, CH₂-O, CH₂-S(O), S(O)-CH₂, CH₂-CH₂, CH₂-CH₂-CH₂, or CH₂-CH₂-CH₂;

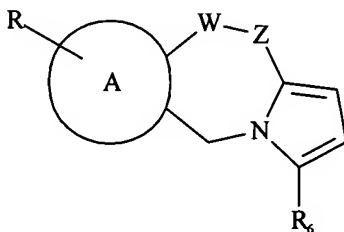
R₃ is H or phenyl;

R₄ is H or hydroxy;

R₅ is H, phenyl, -alkyl-NH₂, -NH-alkyl, or -N(alkyl)₂; and

W is S or Θ

or wherein the compound is



wherein

A is ~~thiazole~~, benzene, or naphthalene, ~~pyridine, pyrimidine, pyrazine, or quinoline~~; and

R is one or more of halogen or NO₂;

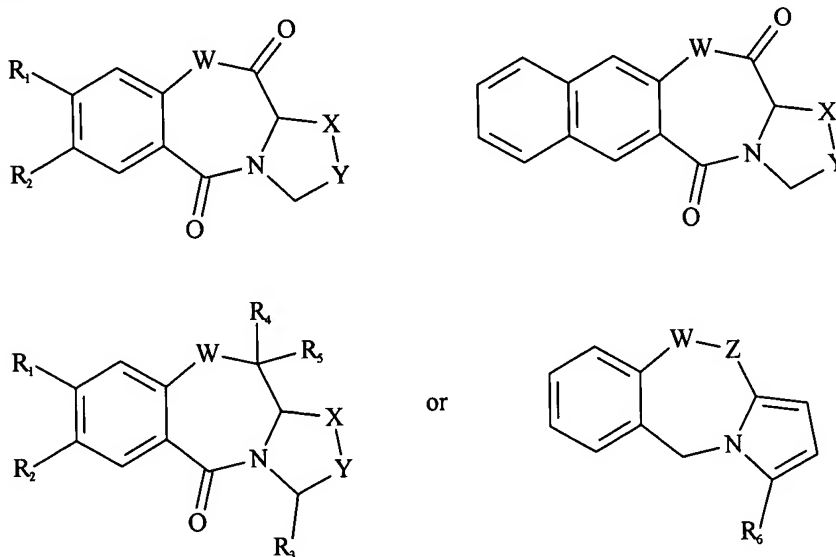
R₆ is H, unsubstituted alkyl or amine, or alkyl or amine substituted with at least one substituent selected from halogen, alkyl, alkoxy, alkylthio, trifluoromethyl, acyloxy, hydroxy, mercapto, carboxy, aryloxy, ~~aryloxy~~, aryl, arylalkyl, ~~heteroaryl~~, amino, alkylamino, dialkylamino, morpholino, piperidino, pyrrolidin-1-yl, or piperazin-1-yl;

W is S or O;

Z is S, O, CH₂, CH₂CH₂, or C=O, -CHCO₂CH₂CH₃, -CHC₆H₄-pF, or -CHC₆H₅.

Claims 48-54 (canceled)

Claim 55 (currently amended): A method of treating HIV infection in a subject, comprising administering to the subject a therapeutically effective amount of a compound selected from the group consisting of:



wherein

X-Y is S-CH₂, CH₂-S, S(O)-CH₂, CH₂-S(O), or CH₂CH₂;

Z is S, O, CH₂, CH₂CH₂, or C=O, -CHCO₂CH₂CH₃, -CHC₆H₄-pF, or -CHC₆H₅;

W is S or O;

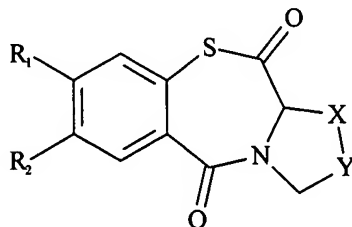
R₁ is H, halogen, lower alkyl, lower alkoxy, or NO₂;

R₂ is H, halogen, lower alkyl or lower alkoxy;

R₃ is H;

R_4 is hydroxy or H;
 R_5 is phenyl or $N(CH_2CH_2)_2NCH_3$; and
 R_6 is $CH_2N(CH_2CH_2)_2NCH_3$,
provided that R_1 and R_2 are not both H or not both alkoxy.

Claim 56 (previously presented): The method of claim 55, wherein the compound is

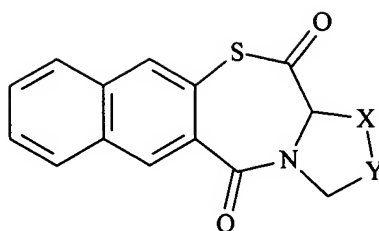


and R_1 is H or NO_2 ;
 R_2 is H, halogen, lower alkyl or lower alkoxy;
provided that R_1 and R_2 are not both H or not both alkoxy.

Claim 57 (previously presented): The method of claim 55, wherein

R_1 is H, R_2 is Cl, X-Y is S- CH_2 ; or
 R_1 is H, R_2 is Br, X-Y is S- CH_2 ; or
 R_1 is H, R_2 is CH_3 , X-Y is S- CH_2 ; or
 R_1 is H, R_2 is Cl, X-Y is CH_2 -S; or
 R_1 is H, R_2 is Br, X-Y is CH_2 -S; or
 R_1 is H, R_2 is CH_3 , X-Y is CH_2 -S; or
 R_1 is NO_2 , R_2 is H, X-Y is CH_2 -S; or
 R_1 is H, R_2 is OCH_3 , X-Y is CH_2 -S; or
 R_1 is H, R_2 is CH_3 , X-Y is S(O)- CH_2 ; or
 R_1 is H, R_2 is Cl, X-Y is CH_2 -S(O); or
 R_1 is H, R_2 is OCH_3 , X-Y is CH_2 -S(O).

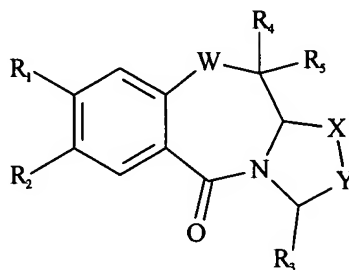
Claim 58 (previously presented): The method of claim 55, wherein the compound is



and X-Y is S-CH₂ or CH₂-S.

Claim 59 (previously presented): The method of claim 55, wherein X-Y is S-CH₂.

Claim 60 (currently amended): A method of treating HIV infection in a subject, comprising administering to the subject a therapeutically effective amount of a compound selected from the group consisting of:



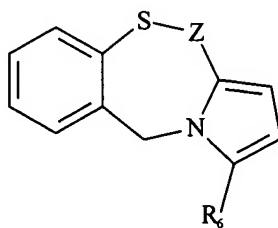
wherein R₁, R₂ and R₃ are H, R₄ is OH or H;

W is S or O;

R₅ is Ph or N(CH₂CH₂)₂CH₃; and

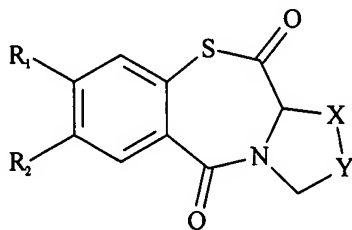
X-Y is CH₂-CH₂.

Claim 61 (previously presented): The method of claim 55, wherein the compound is



and R₆ is CH₂N(CH₂CH₂)₂NCH₃.

Claim 62 (previously presented): A compound having the following formula, or a pharmaceutically acceptable salt thereof, wherein the compound is:



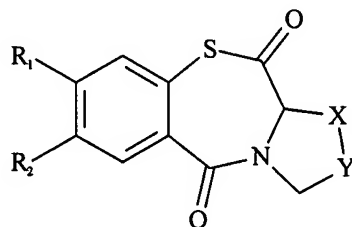
wherein X-Y is S-CH₂, CH₂-S, S(O)-CH₂, or CH₂-S(O);

R₁ is H or NO₂; and

R₂ is H, halogen, lower alkyl or lower alkoxy.

Claim 63 (canceled)

Claim 64 (previously presented): A method of treating HIV infection in a subject, comprising administering to the subject a therapeutically effective amount of a compound selected from the group consisting of:



wherein X-Y is S-CH₂, CH₂-S, S(O)-CH₂, or CH₂-S(O);

R₁ is H or NO₂; and

R₂ is H, halogen, lower alkyl or lower alkoxy.